FTEALMUN'25

GA:1 DISEC
STUDY GUIDE

**CO-UNDER SECRETARY
GENERAL**

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Letter from the Co-Secretaries-General

Distinguished Delegates of FTEALMUN'25,

It is a great honour to welcome you all to FTEALMUN'25. In an age when global challenges affect each of us more profoundly than ever before, this conference represents far more than a gathering of students. It is a space where young voices can question, connect, and take the first steps toward shaping lasting change. The committees and agendas have been crafted with care, each one designed to spark meaningful dialogue, challenge existing perspectives, and inspire innovative solutions to the world's most pressing issues.

The true strength of FTEALMUN'25 lies in its diversity. Bringing together delegates from different backgrounds and viewpoints, this conference is a reminder that progress stems from the exchange of ideas. It is not only about policies or resolutions but about learning from one another, testing convictions, and building a community where every vision is valued. As you take on the role of diplomats, I encourage you to keep your minds open, to lead with patience and empathy, and to embrace the discomfort that often comes with meaningful negotiation.

I hope this experience empowers you to bring your full self into every discussion. Let it be a stepping stone in your journey to becoming thoughtful, forward-looking leaders. Each of you carries a unique perspective, and together you will define the spirit and success of this conference. My team and I are excited to see the passion, creativity, and determination you bring to the table.

On behalf of the entire Secretariat, thank you for joining us in this endeavour. May FTEALMUN'25 not only be remembered for its debates but also for the friendships formed, the lessons learned, and the inspiration that stays with us long after the final session concludes.

Warm regards,

Haktan Efe Özgür, Ela Çakır

Co-Secretaries-General of FTEALMUN'25

Letter from the Co-Under-Secretaries-General

Dear Delegates,

Welcome to FtealMUN'25! It is with great honor and excitement that we welcome you to the DISEC committee. We, as Vuslat Aslı Karataş and Gündüz Kerem Özay, are privileged to serve you as your Co-Under-Secretaries-General. Our agenda item focuses on a critical issue that demands careful attention and action. "Formulating methods to regulate autonomous weapons systems to combat violations of international law and the escalation of an arms race" wishes to address the growing threat posed by autonomous weapons systems, focusing on the need to regulate their development and use in order to prevent violations of international law and curb the escalation of a global arms race. It remains a pressing issue amid rapid technological advancements and insufficient international consensus.

We are confident that this committee will provide every delegate with essential knowledge and inspire innovative solutions to these issues. We also want to thank our honorable Co-Secretaries-General Mr. Haktan Efe Özgür and Ms. Ela Çakır as well as the entire academic team for giving us the opportunity to be a part of this committee.

As the next generation of problem solvers, critics, and thinkers, working toward meaningful solutions and collaborations is key to building communities and systems that promote harmony for everyone.We encourage each delegate to carefully read through this guide and do further research upon the agenda item in order to sufficiently participate during the sessions.

We hope this committee will be a platform for thoughtful dialogue and meaningful collaboration. Most importantly, we aspire to make this experience enriching and memorable for each of you.

Sincerely,
Vuslat Aslı Karataş & Gündüz Kerem Özay

P.S. This committee does not require position papers. But if you wish, please submit your position papers to this email: vuaskrts.mun@gmail.com Thank you for your effort, good luck!

Introduction to the Committee

The United Nations (UN) Disarmament and International Security Committee (DISEC) is the first Main Committee of the General Assembly under the United Nations therefore it is also referred to as "The First Committee". It was established in 1945 after the end of the Second World War. DISEC is also an institution of the United Nations Office for Disarmament Affairs (UNODA). The UNODA deals with nuclear weapons and mass destruction and conventional weapon disarmament. DISEC through its work conducted in the General Assembly for substantive norm-setting support to further its disarmament initiatives. This committee is central to the UN's broader goal of reducing the global arms race and preventing the escalation of military conflicts.

The primary purpose of DISEC is to establish general principles of cooperation in the maintenance of international peace and security. DISEC especially prioritizes the principles governing disarmament and wishes to address threats possessed by both conventional and unconventional weapons. It strives to reduce the spread of weapons of mass destruction especially biological, chemical and nuclear weapons. Throughout its operations DISEC aimed to establish international norms that govern arms control. Overall DISEC wishes to achieve security throughout all regions and to protect citizens across the globe by fostering peace and stability with international cooperation, aiming to contribute to long-lasting solutions.

But even though DISEC is referred to as the Main Committee, it does not have any authority to put any resolutions to act. The influence of DISEC is limited with it only extending to drafts and promotion of international agreements aimed for arms control and disarmament. It operates as an advisory board for the United Nations Security Council (UNSC). Throughout drafts and treaties, DISEC contributes to international cooperation by providing a forum for member states and emphasizing the broader goal of global peace and security despite the political divisions among the member states. DISEC, despite the lack of authority to take action, remains as a vital part of achieving the sustainable development goals and international peace and security via facilitating dialogue, drafting resolutions and promoting agreements.

Agenda Item: Formulating methods to regulate autonomous weapons systems to combat violations of international law and the escalation of an arms race

Introduction to the Agenda Item

The rapid advancement of artificial intelligence and machine-learning technologies has accelerated the development of Autonomous Weapons Systems (AWS), fundamentally reshaping the nature of modern warfare. These systems, capable of selecting, tracking, and engaging targets with minimal or no human intervention, present both unprecedented military advantages and significant legal, ethical, and humanitarian concerns. As states increasingly invest in autonomous capabilities, the international community faces mounting pressure to establish clear regulatory frameworks to prevent unchecked deployment and misuse.

At the core of the debate lies the question of compliance with international law, particularly International Humanitarian Law (IHL). Ensuring distinction, proportionality, and meaningful human control becomes increasingly difficult as autonomy grows more sophisticated. Without robust oversight mechanisms, AWS risk enables violations of IHL, eroding accountability for unlawful actions, and complicating attribution in conflict. These concerns have fueled calls from UN bodies, disarmament experts, and civil society groups to define limits on automation in weapon systems before irreversible harm occurs.

Compounding the legal and ethical challenges is the threat of a global autonomous arms race. As major military powers compete for technological superiority, accelerated development cycles and insufficient transparency heighten the risk of instability and escalation. Less technologically advanced states may feel pressured to acquire or imitate these systems, widening global security disparities. For DISEC, this agenda item represents a critical opportunity to consider regulatory principles, confidence-building measures, and pathways toward international cooperation to ensure that autonomy in weapons does not undermine global peace and security.

Key Terms and Definitions

- **AWS**

  Autonomous Weaponry Systems; a type of military platform that, once activated, can independently conduct military operations without human intervention

- **LAWS**

  Lethal Autonomous Weaponry Systems; a special class of weapon systems that use sensor suites and computer algorithms to independently identify a target and employ an onboard weapon system to engage and destroy the target without manual human control of the system.

- **AI**

  Artificial Intelligence; the application of computer systems able to perform tasks or produce output normally requiring human intelligence, especially by applying machine learning techniques to large collections of data.

- **Autonomous**

  Governed by itself without human interaction.

- **Weaponar**

  Weaponry is all the weapons that a group or country has or that are available to it.

Definition and Classification of Autonomous Weapons Systems (AWS)

There are weapon systems in use today which can select and attack targets without human intervention. After activation by a human operator it is the weapon system, through its sensors and computer programming, which selects a target and launches an attack.

One broad group are anti-material defensive weapons used to protect vehicles, facilities or areas from incoming attacks with missiles, rockets, mortars or other projectiles. These include missile and rocket defence weapons and vehicle "active protection" weapons. The ability to effectively control these weapons and the use of force seems to require certain operational constraints including: limits on the task carried out (i.e. a single function to defend against incoming projectiles); limits on the targets (i.e. primarily objects and vehicles); controls over the operational environment (e.g. limitations on the geographical area and time frame of autonomous operation); and procedures for human intervention to deactivate the weapon, i.e. to cease its operation.

Some offensive weapon systems, including certain missiles and torpedoes also have a level of autonomy in selecting and attacking targets after launch. Many of these weapons are fired into a particular target area, after which on-board sensors and programming take over to autonomously select and attack a specific target object or person within that area. Some have more freedom of action in time and/or space, and therefore greater autonomy. These include, in particular, loitering munitions that search for targets over a wide geographical area for long time periods, and encapsulated torpedo weapons that remain stationary underwater over long time periods but can carry out attacks autonomously.

The trend in the development of missiles appears to be increasing autonomy with respect to movement in time and space. Indications are that future developments could also include increasing adaptability of these weapon systems to their environment. The ability to effectively control these weapons and the use of force may depend on a number of factors (as with defensive systems discussed above) including: limits on the task carried out; the ability of the system to discriminate targets; controls over the operational environment, such as limitations in time and space; and the ability for humans to communicate with the weapon system, for example to deactivate it. The latter is particularly difficult for underwater systems.

There are other anti-personnel weapons that may be capable of autonomously selecting and attacking targets, such as so called "sentry" weapons used to defend facilities and borders. However, the systems in use today apparently remain under remote control for initiation of attacks.

In sum, autonomy for selecting and attacking targets in existing weapon systems is limited by the operational parameters described above. Moreover, the technical characteristics and performance of existing weapon systems, combined with the operational parameters of their use, provide a

certain degree of predictability of the outcomes of using these weapon systems. This predictability may be lost as autonomous weapon systems are used for more complex tasks or deployed in more dynamic environments than has been the case until now.

A. Overview of Current Global Concerns

Autonomous Weapons Systems (AWS) represent one of the most transformative developments in contemporary military technology. Their capacity for independent target selection, combined with rapid advancements in artificial intelligence, raises profound ethical, legal, and strategic concerns. This study guide provides an extensive, academically structured framework for understanding the regulatory challenges posed by AWS. It draws upon international humanitarian law, state practice, UN proceedings, and global security analyses to formulate potential regulatory pathways. The goal is to equip delegates with a comprehensive foundation to engage in substantive, high-level debate within the DISEC framework.

Overview of International Humanitarian Law (IHL)

Convention on Certain Conventional Weapons (CCW)

The CCW is the central international framework for regulating weapons that may be deemed excessively injurious or indiscriminate. It has five protocols that cover mines, booby-traps, incendiary weapons, and blinding laser weapons, though none explicitly regulate autonomous systems. Over the past decade, discussions on Lethal Autonomous Weapons Systems (LAWS) have been held in the GGE, where states debate definitions, risks, and potential future legal restrictions.

The GGE examines how AWS could comply with International Humanitarian Law and considers options such as meaningful human control or partial bans. Civil society organizations and several UN special rapporteurs have contributed reports urging clearer legal limits. These discussions emphasize both the potential humanitarian benefits of restrictions and the need to prevent an accountability gap in case of violations.

Protocol I Additional to the Geneva Conventions (1977)

Protocol I codifies the principles of distinction, proportionality, and precaution in attacks. These principles are central to evaluating whether AWS can lawfully identify combatants and civilians in real-time. States have a legal obligation to ensure that any weapons deployed in conflict do not cause unnecessary suffering or indiscriminate harm.

Although Protocol I predates autonomous weapons, its rules are widely applied in discussions of modern military technology. Experts frequently assess AWS against its provisions to determine whether full autonomy in targeting would violate international humanitarian law. The Protocol

provides a legal benchmark to evaluate emerging technologies even when they are not specifically mentioned in the text.

The Geneva Conventions (1949)

The Geneva Conventions are the cornerstone of international humanitarian law. They protect civilians, prisoners of war, and wounded soldiers during armed conflict. While they do not mention autonomous weapons, the conventions set obligations for the treatment of individuals and regulate the conduct of hostilities.

In discussions about AWS, the conventions are often cited to emphasize the requirement for discrimination between combatants and civilians. Any failure by an AWS to comply with these protections could be considered a violation of state obligations. Moreover, the conventions provide the legal foundation for assessing war crimes related to automated or autonomous systems.

International Covenant on Civil and Political Rights (ICCPR)

The ICCPR protects fundamental human rights, most notably the right to life under Article 6. Autonomous weapons capable of lethal action must be evaluated to ensure they do not arbitrarily deprive individuals of life. States are required to provide legal frameworks and oversight to ensure that AWS do not violate human rights, even when used outside armed conflict.

The Human Rights Committee's General Comment No. 36 clarifies that the right to life cannot be suspended, and lethal force must be necessary and proportionate. Therefore, AWS deployment in policing, border control, or law enforcement scenarios comes under intense scrutiny. Human rights bodies have raised concerns about accountability and the impossibility of a machine to make context-sensitive ethical judgments.

UN Charter

The UN Charter sets out the fundamental rules governing the use of force between states. It prohibits the threat or use of force against the territorial integrity or political independence of any state, except in self-defense or when authorized by the Security Council. Autonomous weapons, like all military systems, must comply with these obligations.

The Charter's principles are also relevant in debates on state responsibility. The deployment of AWS that violates international law could be considered an unlawful use of force under Article 2(4). Additionally, discussions about AWS frequently reference the Charter in terms of ensuring that emerging technologies do not escalate conflicts or violate state sovereignty.

The Martens Clause

The Martens Clause appears in the preamble of the Hague Conventions and is reaffirmed in Protocol I. It establishes that in cases not covered by treaty law, civilians and combatants remain under the protection of principles of humanity and the dictates of public conscience. This is particularly relevant to AWS, which are not yet fully regulated under existing treaties.

Because there is no dedicated AWS treaty, the Martens Clause is often invoked to argue that fully autonomous lethal systems may violate basic humanitarian principles. It serves as a normative guideline suggesting that emerging technologies must be evaluated against the evolving standards of ethical and moral responsibility in warfare.

Arms Trade Treaty (ATT)

The Arms Trade Treaty regulates the international transfer of conventional weapons and their components. While AWS are not specifically mentioned, the ATT's risk assessment criteria require states to consider whether a weapon could be used to commit human rights violations. This makes the ATT indirectly relevant to AWS exports and transfers.

States must ensure that weapons sold internationally are not likely to be used in violation of human rights or humanitarian law. Civil society organizations have highlighted that AWS proliferation could create new legal and ethical risks. The ATT framework offers one of the few legal tools to control the spread of autonomous systems before specific treaties are adopted.

The Arms Trade Treaty (ATT) is known as the first legally-binding instrument ever made inside the United Nations that sets common rules for the international trade of conventional weapons. The idea of forming shared international standards for arms trading has been around for a long time, it can even be traced back to the League of Nations, who made a draft convention on the arms trade that never ended up being adopted. While international law during the Cold War focused a lot on stopping the spread of weapons like chemical, biological and nuclear ones, there wasn't really any major progress when it came to conventional weapons.

After the Cold War ended, the international community started paying more attention to the impact of widespread armed violence, especially in places dealing with poverty and deep inequality. In the early and mid-1990s, to try and control the spread of conventional arms, different sets of rules or guidelines started appearing among some of the major arms-exporting countries. During the period of 1993 to 1997, the biggest arms suppliers were the Permanent Five (P5) members of the UN Security Council, along with Germany.

A lot of supplier countries started to follow stricter arms transfer policies, especially when there was a high risk of human rights violations in the receiving country. The United States recognized that the issue of arms proliferation was global, and called on the P5 to meet and talk about

making transfer guidelines. Even though the P5 had agreed in 1991 to come up with a set of "Guidelines for Conventional Arms Transfers", disagreements made the process collapse by 1992.

In that same year, 1991, the UN established the United Nations Register of Conventional Arms, which was supposed to be a key international tool to bring more predictability and transparency to the global arms trade. Then in 1997, a group of Nobel Peace Prize laureates led by Dr. Oscar Arias, who was the former president of Costa Rica, launched an International Code of Conduct on Arms Transfers. And by 1998, the European Union became the first regional group to accept its own Code of Conduct on Arms Exports, since Western Europe was the second biggest arms exporting region at the time.

Illicit arms trafficking started to become a bigger problem, especially in regions like Africa, Latin America, the Pacific and South-East Asia.A study done by the International Committee of the Red Cross (ICRC) in 1999 showed that the uncontrolled availability of weapons was one of the main causes of civilian suffering during and after armed conflicts . It led to more casualties and made it harder to provide humanitarian and development aid.In 2003, the Small Arms Survey reported that in countries like Fiji, Papua New Guinea and the Solomon Islands, suffered from things like forced displacement, human rights abuses, economic collapse and civilian deaths could all be linked to the easy access to conventional weapons.

Progress at the UN level first happened in the area of small arms and light weapons, since they were seen as the main weapons used in modern internal conflicts and violence. A big breakthrough came in 2001 at the UN Conference on the Illicit Trade in Small Arms and Light Weapons, where countries agreed on a non-binding programme called the UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects.

By 2006, the global focus started shifting back to conventional arms in general. Many States began pointing out that the global banana trade was more regulated than the arms trade, which really highlighted the gap in international law. That same year, seven governments; Argentina, Australia, Costa Rica, Finland, Japan, Kenya, and the United Kingdom who were known as the "co-authors", supported by a civil society campaign and Nobel Peace Prize Laureates, brought the first UN General Assembly resolution on creating an Arms Trade Treaty. The resolution said that not having shared standards on arms transfers was making conflict, terrorism, crime, and displacement worse, and that it was also harming peace, stability, security, and development.

From 2006 to 2013, the path to adopting the ATT wasn't easy. States came into the negotiations with very different goals. Exporting countries saw the ATT as a way to help their defense industries operate more openly in the global market. They wanted fair competition and standard rules. Transit and trans-shipment countries didn't want to be burdened with too many new

regulations. On the other side, importing countries wanted to protect their right to choose weapons for self-defense.

There were also countries who were heavily impacted by violence and instability due to illicit arms flows. These countries saw real benefits for their national and local security if the ATT was strong and enforced properly. Others pushed for strong humanitarian outcomes from the treaty. Regional organizations also played an important role since many already had some level of control or regulation over arms transfers at a regional level.

It's important to mention that political agreement on the ATT was never guaranteed. The UN hadn't successfully negotiated a multilateral arms control treaty since the 1990s. So when the ATT was adopted by a huge majority in the General Assembly in 2013, it became a major milestone not just for arms regulation but also for the idea of multilateral cooperation through the United Nations.

Ethical and Humanitarian Considerations

The idea of using autonomous weapons, which are able to decide on their own without needing any human intervention, brings numerous trust issues and humanitarian problems alongside their effectiveness. Giving machines and programs authority is seen as a crucial risk by a huge portion of the world's citizens, considering that they are lacking the emotions and ethics of humans, as well as the recognition skills. Also, keeping in mind that they are not completely safe from any possible cyber attacks and hackers, these facts create huge question marks about using them without damaging human rights.

Human Control and Decision-Making in the Use of Force

Autonomous Weapons Systems (AWS) are defined as mechanical weapons that have the ability to select and even engage targets, usually almost completely without human intervention. The mechanism of these weapons relies on algorithms, sensors, and sometimes artificial intelligence to successfully identify targets and make a decision about when to shoot.

These weapons lie along a long spectrum:

Human-in-the-loop: Humans make a final decision about engaging the target

Human-on-the-loop: The system goes on autonomously, but a human takes part to supervise and is allowed to intervene or abort in any situation.

Human-out-of-the-loop: The system selects and engages targets completely on its own without any human input.

When it comes to integrating mechanisms with such abilities, the obvious concern that makes people nervous is the paths these weapons will follow to make decisions. Many civilians have vital concerns about letting machines potentially threaten human lives. The main focus in debates referring to AWS is how much human control should remain in the decision-making to use lethal force. Numerous humanitarian organizations (like the UN and ICRC), scholars, and policymakers constantly argue that the force must be done under human control. According to this perspective, humans should: **Understand** how the system works and be aware of its limitations; **Supervise** how the system works and have the ability to intervene; and **be accountable** for the decision to use force. Without using meaningful human control, it would not be clear who is responsible for unlawful or war crimes. The conflict also raises some questions about Ethical and Legal Dimensions. International Humanitarian Law (IHL) requires human interaction in applying principles like distinguishing combatants from non-combatants and avoiding civilian harm. Using entirely autonomous weapons may not reliably meet these requirements. Also, leaving life-and-death situations to machines creates moral concerns since machines lack empathy, moral reasoning, and accountability.

Considering all of these facts, some countries and NGOs advocate banning fully autonomous lethal weapons, while others support establishing some regulations, like technological safeguards, such as designing AI systems with built-in mechanisms for human verification and fail-safe deactivation.

Ethical Implications of Delegating Lethal Authority

Delegating life-and-death situations to emotionless machines raises worries among citizens. Humans can exercise compassion, implement empathy, and have ethical restraints, abilities that machines lack. Critics have huge concerns, demanding that allowing machines to have the right to choose who lives or dies violates basic moral principles.

Also, at the time of an unexpected error or unwanted civilian damage, it is not clear who is legally or ethically responsible. Is it whether the programmer, the commander, the manufacturer, or the machine itself (which can not be held responsible)? Choosing the actual responsible party becomes hard since there is more than one intervention.

Additionally, using autonomous weapons to select targets and kill humans creates a distance between human decision-makers from the consequences of ending a life and normalizing violence, challenging values about the sanctity of life.

Impact on Civilian Populations and Non-Combatants

Autonomous weapons rely on sensors, artificial intelligence, data inputs, etc., to make a decision when selecting a target and then engaging. And sometimes these mechanisms may fail to interpret complex human environments. Crowded cities, blurred combatant-civilian zones, and

unpredictable civilian behavior can cause autonomous systems to possibly misclassify civilians as threats, misinterpret objects or movements as hostile, and fail to recognize surrenders. These actions raise the probability of unlawful or unintended civilian casualties.

When autonomous systems kill civilians, the actual responsibility is almost impossible to determine. States, commanders, programmers, and all the others who worked on the system can deflect blame. This results in getting no response when the victims' family or relatives ask for the guilty.

Refugees, minorities, and people living in highly populated rural areas are the main risk concern. The insufficiently trained algorithm may misclassify people with traditional clothing, darker skin tones, and even children as a possible source of threat, leading to discriminatory or random targeting. Such events usually end in huge trust and fear issues towards autonomous systems amongst civilians. Communities may feel inessential and worthless, knowing life-and-death decisions are made by emotionless algorithms. At the same time, autonomous weapons can not always reliably distinguish between combatants and humanitarian workers (medics, suppliers, aid convoys). This probability increases the danger for NGOs.

Philosophical Perspectives on Machine Autonomy in Warfare

Using autonomous weapons in a modern world means making a huge reform in the history of warfare. Instead of being present at the battlefield and taking part in the conflict, leaving these duties to self-controlling machines raises huge disagreements about moral restraints.

Using them actively in the military brings up an inconsiderable question: Can autonomous weapons be considered morally suitable? Since they lack a lot of human emotions like consciousness, empathy, and ethical values, many philosophers are currently arguing that they can not make moral decisions about ending a human life.

Delegating lethal decisions to algorithms risks distancing humans from the ethical values of warfare. This may normalize the use of autonomous weapons for violence and weaken moral restraints while creating a responsibility gap. When an autonomous weapon commits an unlawful or unintended act, no human is directly responsible. This vitally damages the ethical frameworks built on human accountability.

On the other hand, some critics state that banning AWS would be a blow to the advancement of technology and overlook potential benefits like reduced soldier casualties. But others try to get through this by moral boundaries, not technological capacity, which should determine acceptable use of force.

Security and Geopolitical Dimensions

Using autonomous Weapon Systems (AWS) has many benefits, such as lowering the cost of deploying soldiers while creating strategic advantages like speed, persistence, and decreased troop risk. Considering all of these facts, countries have been in a global arms race to acquire AWS for the last decades, not for aggression, but because of the fear of being outmatched by other states in the race.

Nations tend to use AWS in their military. Integrating them into the defence system means enabling faster decision-making and vital high-tempo operations that can surpass human control.

However, countries with highly advanced robotics and Artificial Intelligence capacities (the US, China, Russia, and some EU countries) keep a disproportionate amount of advantage. Meanwhile, developing countries face the danger of being strategically dependent or vulnerable. This gap in the advancement of technology between states can create new geopolitical blocs, boost inequality, and possibly damage security frameworks.

Another issue is, exported or poorly secured AWS components have a risk of being captured by terrorists, insurgent groups, or even private military companies.

All of these conditions make critics want to focus deeply on autonomous systems.

Strategic Stability and Deterrence Dynamics

Autonomous Weapons Systems (AWS)undermine the classical deterrence methods, which are led by humans. Since AWS is able to take actions much faster than human-controlled systems, enemies may be afraid of any incoming or probable surprise attacks or machine-controlled ambushes. This leads to a weakening of the stabilizing effect of mutual restraints.

States believe that having superior autonomous capabilities gives them the upper hand and the beneficial option of a decisive early strike. This stimulates them to make a first move, as militaries might seek the opportunity to disable or sabotage opponents' AWS infrastructure before it can be used, damaging the enemy's deterrence and making it less effective.

AWS is usually kept hidden and secure by cyber infrastructure, complex algorithms, and sensors with AI. This opacity results in states planning for the worst case, as they can not have any data about each other's capabilities. Being afraid of possible hidden autonomous capabilities ends in arms build-up and also reduces trust between nations.

If autonomous systems get integrated into nuclear defence and military mechanisms, especially command-and-control (for instance, early-warning algorithms or automated defense systems), any error may directly affect strategic deterrence. In case of misidentifying non-threats as incoming attacks could trigger unwanted consequences.

Probably the most concerning risk of using AWS is that it may misinterpret signals, detect false data, and react automatically to detected threats.

A. Risks of Arms Races and Global Militarization

The current sets of circumstances of the competition in armament and global worldwide militarization represent one of the most serious threats to international peace and stability for the entire entities of the world in the 21st century. These phenomena take place while countries rapidly expand and modernize their conditions of military capabilities in response to real or perceived threats from others who are against their posture on ambidextrous diverse points of view, often causing a cycle of escalation that leads the whole situation into chaos globally, where the fundamental standards decrease.

Whether one state increases its military strength, which includes the defense and attack arm systems in internal and external affairs, that situation causes the rise of tension among international relations since the administrations of other countries have the potential to oversee the situation as a threat against the stability in local, regional, and global conditions. Owing to that situation, **security dilemmas** lead to counter-armament, which is also the reason for creating a self-reinforcing cycle.

With the collaboration of military forces from various countries, the current new technologies are being integrated into the arms race for the purpose of enhancing the military standards of the army and raising the quality of militarization regarding the internal and external affairs of the country to their benefit. Therefore, the **technological breakthroughs** in matters of the military, such as AI weapons, hypersonic missiles, cyberwarfare, and drones, cause fear of falling behind, which drives accelerated budgets.

The regional conflicts splits the countries as diverse blocks which are against each other's intention due to controversial perspectives which gather the countries under the aims of competition for resources that leads to much worsening circumstances for the future of the region, spheres of influence that have the potential to impact global individuals under deteriorating conditions, or ideological dominance that increases the polarization between societies which furtherly becomes the principal reasons of the disputes. Thus, **geopolitical rivalries**, especially in the regions of the South China Sea, the Indo-Pak border, Middle East, pose a very influential risk against regional and global fairness and peace.

The international communities, regional organizations, government bodies, non-governmental organizations and more have taken, have been taking and will be taking actions against the uncontrolled sets of conditions towards the military. Nonetheless, the changing external affairs of the diverse countries states the rise in withdrawal from arms control treaties, which leads to the current intentions in order to focus on armament, which has great potential in the interest of escalating the tension within various countries, that strengthening the conflict in multidirectional ways. Consequently, the **erosion of arms control agreements** causes a lack of trust, which generates arms limitations in difficult situations to negotiate, such as the agreements of the Intermediate-Range Nuclear Forces Treaty (INF Treaty), the Treaty on Open Skies, and the Joint Comprehensive Plan of Action, which were the treaties aiming to observe the flow of armament.

B. Use of AWS by Non-State Actors and Rogue Regimes

Autonomous Weapon Technologies and components (especially small drones, AI-algorithms, and old robotics) are generally easy to access, globally traded, and inexpensive. Insufficient security measures, such as weak export controls or illicit markets, create a suitable ground for terrorist organizations, regional rebels, and criminal networks to obtain semi-autonomous weapons. These problems raise concerns about the usage of this system, besides having a very efficient capability in the military with all its advantages, so some states and critics are worried about the possible unwanted conflicts AWS may cause in the future due to containment insufficiency or being in the wrong hands.

Non-state actors can use AWS to engage targets/assassinations, or plan wide-casualty attacks with minimal soldier risk. Using autonomous swarms gives the owning state an advantage to overwhelm defenses, giving small groups disproportionate destructive and violent capacity. Also, unlike states, which follow and regulate their laws according to International Human Law (IHL), non-state actors and rogue regimes do not have an obligation to meet the humanitarian law and lack arms-control norms. They may intentionally design AWS to target civilians, take advantage of algorithmic unpredictability, or refuse to be responsible by claiming machine error. UN peacekeeping missions and counterterrorism operations are currently in a more dangerous condition as non-state actors use AWS to conduct fast and unpredictable attacks. The traditional methods, like troops and close contact, become less effective, increasing operational risks.

The origin of Autonomous systems can be simply modified to become blurred or even untrackable. By removing their serial numbers, altering software, or using commercially available components. This fact makes it more difficult for the international community to track incoming attacks, blur out legal accountability, or impose sanctions. One more possible issue about AWS is that major powers may covertly supply autonomous systems to proxy groups or rogue regimes to strengthen geopolitical interests and goals while maintaining a good image.

To prevent misuse, states and the international community must advance verification systems, conduct inspections more frequently, regulate AI-enabled components, and, if necessary, collaborate with the private sector to track dual-use technologies. Without these regulations being put in place, AWS proliferation will accelerate.

C. Regional and Global Power Imbalances

One of the principal causes of instability in the matters of internal and external affairs ıof the countries is the power unfairness, whether they are referring to regional conditions and global circumstances. Military Capabilities, economic strength, and diplomatic leverage among states or blocs are such one of the significant consequences of the imbalances. These asymmetries have been shaping global governance, conflict dynamics, development patterns, and the capacity of states to assert their interests on the world stage.

The **regional power imbalances** occur when one or a small group of states dominates a specific geographic area for the purpose of holding irrational political, economic, or military influence over their neighbors. For instance, the region of Russia in Eastern Europe/Caucasus, India in South Asia, Iran and Saudi Arabia in the Middle East, and South Africa in Southern Africa are prominent symbols for unrighteousness.

The **global power imbalances** take place via unequal distribution of power at the international level by impacting the external affairs and approaches of other countries via forming great powers at the center of global institutions, rules, and norms. To illustrate, the United States' global military and economic influence, China's rising economic and geopolitical reach, and unfair representation in the United Nations Security Council are distinctive marks of unjustness.

The power imbalances have the potential to affect the matters of countries in the means of military, economy, politics, diplomacy, technology, and more. The **unequal military capabilities** allow stronger states in order to exert deterrence, coercion, or intervention; furthermore, nuclear weapons remain the strongest lever in global power politics, held by only a few states. The

unfair economic power ensures that wealthier countries dominate trade routes, commodities, infrastructure financing, and global markets; moreover, economic sanctions have become tools disproportionately wielded by global powers. The **more-granted political and diplomatic power** provides the countries that hold more power with the determination to influence in global respective institutions. The **advanced technological power** supplies the control of advanced technologies such as Artificial Intelligence, aerospace, and cyber capabilities, via giving major states strategic advantages and creating digital dependencies for other countries.

Case Studies and Real-World Applications

In the always-changing new modern age, development and new technologies are the primary values that keep human civilization going forward with more and more research and experiments in every class, such as education, transportation, medicine, and, as it has been for millennia in human history, warfare systems. Integrating the new technology, like Autonomous Weapons Systems, into basic military mechanisms may seem like a totally correct decision; however, it brings many problems and contrasts when it comes to using them in real life.

The conduct of AWS in long or short-term wars and conflicts has the ability and potential to shift battlefield dynamics by enabling precision strikes and overwhelming air defenses. The instances that can be seen from other experiences with using AWS highlight the destabilization effects of low-cost autonomous weapons in regional disputes and the imbalance they create.

Case Study: Use of Semi-Autonomous Systems in Recent Conflicts

Ukraine Conflict (2022-present)

During the war between Ukraine and Russia, both states have deployed autonomous or AI-supported systems for a high-hand advantage by target identification, exploration, and strike operations. The constant improvement (including swarm development and automated targeting) exemplifies how AWS changes in real time in major conflicts, making it more complex for regulation and increasing escalation risks.

Libya (2020)

UN reports suggested that the drones owned by Turkey may have engaged in fully autonomous strikes during the Libyan civil war. This case demonstrates the risks of deploying AWS in fragile regions where governance and authority are weak. Plus, this raises concerns about accountability and verification, as well as disobeying IHL.

Nagorno-Karabakh (2020-2023)

Azerbaijan's use of Israeli and Turkish loitering munitions showcased how autonomous and semi-autonomous weapons can change the future of the conflict with highly spot-on strikes and better air defense systems.

Israel-Gaza Operations (Various Years)

In the more than one conflicts between Israel and Gaza, Israel has deployed numerous AI-supported systems, including autonomous surveillance towers and AI-assisted targeting networks. Even though human commanders make the final decision for strikes, the targeting recommendations are semi-autonomously generated, leading to speeding the kill chain. Even with human interventions, semi-autonomous decision-making systems shorten reaction time, increasing the risk of misidentification or disproportionate use of force.

South Korea's SGR-A1 Sentry Systems

SGR-A1 Border defense robots of South Korea can detect, track, and issue warnings. While firing instruction needs human approval, the autonomous detection and targeting features are highly advanced.

Lessons Learned from Historical Arms Control Agreements

Chemical Weapons Convention (CWC)

Arms control efforts should meet with the complete, precise definitions of chemical weapons and toxic agents. Any uncertainties create gaps.

Lesson for AWS: The international communities are obligated to clearly define levels of autonomy, target selection, and human control to avoid states exploding grey areas.

NPT, INF Treaty

Treaties like the Nuclear Non-Proliferation Treaty (NPT) and the Intermediate-Range Nuclear Forces (INF) Treaty were effective when paired with strong inspection systems, data exchanges, and monitoring technologies.

Lesson for AWS: Any AWS regulation must include technical verification, transparency requirements, and inspection protocols to ensure compliance.

(MTCR, Wassenaar Arrangement)

Export restrictions on cyberspace and missiles illustrated how difficult it is to control technologies with both military and civilian uses. Both autonomous systems and artificial intelligence have two uses.

Lesson for AWS: Export controls must be carefully crafted to prevent harmful military uses without obstructing legitimate civilian innovation.

(SALT → START)

American progress. Instead of a single, massive treaty, the Soviet Union disarmed its nuclear weapons through a series of smaller agreements. Gradual actions increased self-assurance and made deeper commitments possible.

Lesson for AWS: Before negotiating comprehensive regulation, states may first agree on more limited measures, like prohibitions on fully autonomous lethal systems or transparency protocols.

(CTBT, Ottawa Treaty)

Strong humanitarian advocacy and political momentum helped some agreements, like the Comprehensive Nuclear-Test-Ban Treaty (CTBT), succeed while others, like the Anti-Personnel Mine Ban Convention, stalled because they were not ratified.

Lesson for AWS: It will take consistent political work, coalition building, and leadership from both major powers and civil society to achieve effective AWS regulation.

(Landmine & Cluster Munitions Bans)

By highlighting civilian suffering and long-term humanitarian harm, treaties limiting landmines and cluster munitions gained international support.

Lesson for AWS: Bringing attention to ethical issues, accountability flaws, and dangers to civilians can galvanise support for AWS's restrictions worldwide.

(Open Skies Treaty, CFE Treaty)

Regulations must offer strategic benefits to all parties—not just restrictions—to ensure *long-term adherence.*

Lesson for AWS: To guarantee long-term compliance, regulations must provide strategic advantages to all stakeholders, not just limitations.

(CWC Implementation)

The development of useful verification standards by the scientific and industrial communities contributed to the success of chemical weapons controls.

*Lesson for AWS***:** Collaboration between AI developers, robotics firms, and cybersecurity specialists is necessary for effective AWS regulation in order to guarantee workable and enforceable regulations.

Industry and Military Perspectives on AWS Regulation

Military Perspectives

Militaries see autonomous systems as an opportunity to improve precision, decrease the possibility of risks, and help make faster decisions.

While they value autonomy, maintaining human-in-the-loop controls is a better choice for them due to making lethal decisions. Using this method helps prevent accidental escalation and creates a better image for reliability. Additionally, it aligns with International Humanitarian Law (IHL).

Most militaries state that if one country restricts or bans AWS and its rivals do not, this may cause an imbalance in power. This fear pushes them more into investing and improving while also complicating global regulation.

Autonomous systems must be suitable within existing military procedures, like rules of engagement, reporting systems, and reviews of after-action. Military state regulations that simplify and brighten responsibility chains without blocking operational flexibility. In the end, militaries are in favour of laws that improve safety and accountability without reducing operational efficiency or placing them at a competitive disadvantage. They favour unambiguous, workable regulations that fit in seamlessly with current command structures, permit further autonomy growth, and guarantee adherence to international law.

Industry Perspectives

In general, industry viewpoints on regulating autonomous weapons systems (AWS) strike a balance between technical and ethical considerations as well as strategic advantage. Since autonomy increases speed, accuracy, and military effectiveness, many defence and AI companies are in favour of ongoing AWS development. They are also concerned that strict prohibitions may cause states to lag behind their international rivals. Industry participants are aware of risks, though, including the possibility of public backlash, legal liability, and unpredictable AI behaviour. As a result, businesses often prefer technical, flexible regulations, such as safety checks, post-deployment monitoring, and maintaining a certain level of human control, over stringent international prohibitions.

Furthermore, companies also voice concerns about the fragmentation of regulations across nations. Different national regulations may make it more difficult to communicate with allied militaries, export, and supply chains. Because of this, a lot of businesses support globally aligned norms and standards, which are non-binding rules that promote responsible use without placing strict limitations. This strategy fosters common standards for safety, responsibility, and openness in the creation of autonomous weapons while allowing innovation to proceed.

Questions to Ponder

- How should Autonomous Weapon Systems be defined, and what criteria distinguish autonomy from automation?
- In what operational contexts should AWS be allowed to use?
- How can we AWS comply with International Humanitarian Law, particularly the principles of distinction, proportionality, and precaution?
- How does International Human Rights Law apply to AWS outside armed conflict?
- How can accountability be established when harm is caused by an autonomous system, and who bears responsibility?
- What regulatory options exist at the national and international levels, and what positions do states hold on AWS?

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